

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claims 1-15 (cancelled)

Claim 16 (Currently Amended): ~~The sound detecting mechanism as claimed in claim 14,~~A sound detecting mechanism comprising a pair of electrodes forming a capacitor on a substrate in which one of the electrodes is a back electrode forming perforations therein corresponding to acoustic holes and the other of the electrodes is a diaphragm,

wherein the diaphragm is made of at least one of a metal film and a laminated film, the metal film being formed by at least one of sputtering in a low temperature process, vacuum vapor deposition and plating technique, the laminated film being formed of an organic film, a conductive film, or any combination thereof,

the back electrode is formed on the substrate,

a spacer is formed from part of a sacrificial layer comprising an organic film for determining a distance between the diaphragm and the back electrode, and

wherein, the metal film is made of at least one of Si, Al, Ti, Ni, Mo, W, Au and Cu, by using the at least one of the sputtering process and the vacuum vapor deposition, or formed by laminating a plurality of materials selected from the group consisting of Si, Al, Ti, Ni, Mo, W, Au and Cu, thereby constituting the diaphragm.

Claims 17-19 (Cancelled):

Claim 20 (Currently Amended): ~~The sound detecting mechanism as claimed in claim 14,~~A sound detecting mechanism comprising a pair of electrodes forming a capacitor on a substrate in which one of the electrodes is a back electrode forming perforations therein corresponding to acoustic holes and the other of the electrodes is a diaphragm,

wherein the diaphragm is made of at least one of a metal film and a laminated film, the metal film being formed by at least one of sputtering in a low temperature process, vacuum vapor deposition and plating technique, the laminated film being formed of an organic film, a conductive film, or any combination thereof,

the back electrode is formed on the substrate,

a spacer is formed from part of a sacrificial layer comprising an organic film for determining a distance between the diaphragm and the back electrode, and

wherein a material having resistance to anisotropic etching is used as a base for the sacrificial layer.

Claim 21 (Cancelled)

Claim 22 (Currently Amended): ~~The sound detecting mechanism as claimed in claim 14,~~A sound detecting mechanism comprising a pair of electrodes forming a capacitor on a substrate in which one of the electrodes is a back electrode forming perforations therein corresponding to acoustic holes and the other of the electrodes is a diaphragm,

wherein the diaphragm is made of at least one of a metal film and a laminated film, the metal film being formed by at least one of sputtering in a low temperature process, vacuum vapor deposition and plating technique, the laminated film being formed of an organic film, a conductive film, or any combination thereof,

the back electrode is formed on the substrate,

a spacer is formed from part of a sacrificial layer comprising an organic film for determining a distance between the diaphragm and the back electrode, and

wherein the diaphragm is formed of a plated layer formed by plating technique, and an adhesion layer is disposed between the plated layer and an insulating layer formed on the substrate for enhancing adhesion.

Claim 23 (Cancelled)

Claim 24 (Currently Amended): ~~The sound detecting mechanism as claimed in claim 14,~~A sound detecting mechanism comprising a pair of electrodes forming a capacitor on a substrate in which one of the electrodes is a back electrode forming perforations therein corresponding to acoustic holes and the other of the electrodes is a diaphragm,

wherein the diaphragm is made of at least one of a metal film and a laminated film, the metal film being formed by at least one of sputtering in a low temperature process, vacuum vapor deposition and plating technique, the laminated film being formed of an organic film, a conductive film, or any combination thereof,

the back electrode is formed on the substrate,

a spacer is formed from part of a sacrificial layer comprising an organic film for determining a distance between the diaphragm and the back electrode, and

wherein the thickness of the back electrode is controlled by an inspection pattern juxtaposed to a sound detecting mechanism pattern on the substrate.

Claims 25-26 (Cancelled)